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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,608	03/15/2004	Norikazu Ota	119100	8411
25944 7590 10/15/2008 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
KAYRISH, MATTHEW				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/799,608

Applicant(s)

OTA ET AL.

Examiner

MATTHEW G. KAYRISH

Art Unit

2627

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,7,8 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,7,8 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1, 4 and 8 have been amended. Claims 1, 3, 4, 7, 8 and 11 remain pending.

Response to Arguments

2. Applicant's arguments filed 6/27/2008 have been fully considered but they are moot in view of the new grounds of rejection.

As indicated in an interview between Abdul Basit and the examiner on 6/24/2008, the amendment is sufficient to distinguish the present application from Sluzewski and Kamijima, however upon further consideration; a new rejection is made in view of Sluzewski et al (US Patent Number 6985332), Kamijima (US PG-Pub 2003/0099054) and Rancour et al (US Patent Number 6757135).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 4, 7, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sluzewski et al, in view of Kamijima and further in view of Rancour et al.

Regarding claims 1, 4 and 8, Sluzewski discloses:

A hard disk drive (figure 1, item 100) comprising:

A head gimbal assembly (figure 1, item 122) including an arm member (figure 1, item 108) mounted with a head slider (figure 3, item 140); and

A recording medium (figure 1, item 102);

The head slider (figure 3, item 140) comprising:

A conductible support (figure 1, item 124 is conductible via item 130; column 6, lines 46-63) for mounting the head slider to the arm member (figure 1, item 126 is mounted to item 108 via item 124); and

A magnetic head part (figure 3, item 142) bonded to the conductible support (column 6, lines 46-63), the magnetic head part carrying out at least one of recording and reproducing of information (column 6, lines 3-6);

The magnetic head part comprising:

A device to be energized (figure 3, item 128) including first and second poles (column 7, lines 38-52) for supplying a current between the first and second poles (official notice is taken based on column 7, lines 7-22); and

An energizing electrode pad (figure 5, item 148a) disposed on a first surface of the head slider (figure 3, the electrode pad is conductible by the right surface) on a side opposite from the conductible support (figure 3, support extends in opposite direction from the first surface);

The first pole of the device to be energized being electrically connected to the energizing electrode pad (column 7, lines 7-22 & 38-52);

The second pole (figure 5, item 148b) of the device to be energized being conductible by way the second surface of the slider (column 7, lines 7-22 & 38-67; figure 3, the poles are conductible by the bottom surface);

Wherein the first and second poles form a circuit with the device energizing the device (column 7, lines 38-67) when current flows through the device via the first and second poles (column 7, lines 6-37).

Sluzewski fails to specifically disclose:

Wherein the second surface is not in contact with the first surface of the head slider;

The device to be energized is a heater element.

Kamijima discloses:

A hard disk drive (figure 1) comprising:

A head gimbal assembly (figure 1, item 17) including an arm member (figure 1, item 14) mounted with a head slider (figure 2, item 21); and

A recording medium (figure 1, item 10);

The head slider (figure 2, item 21) comprising:

A conductible support (figure 2, item 25) for mounting the head slider to the arm member (figure 1, item 17 is mounted to item 14); and

A magnetic head part (figure 2, item 21) bonded to the conductible support (paragraphs 62 & 63), the magnetic head part carrying out at least one of recording and reproducing of information (paragraph 60);

The magnetic head part comprising:

A device to be energized (figure 4, item 45) including first and second poles (figure 3, items 32 & 35) for supplying a current between the first and second poles (official notice is taken based on paragraph 65, which states electrically connected); and

An energizing electrode pad (figure 3, items 32 & 35) disposed on a first surface of the head slider on a side opposite from the conductible support (figures 2 & 3);

The first pole of the device to be energized being electrically connected to the energizing electrode pad (paragraph 65); and

The device to be energized is a heater element (figure 4, item 45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the head element of Sluzewski with a heater element, as taught by Kamijima, because this will cause thermal expansion which brings the head closer to the medium for a stronger recording, as stated in paragraph 67.

Kamijima fails to specifically disclose:

Wherein the second surface is not in contact with the first surface of the head slider.

Rancour discloses:

A hard disk drive (figure 1) comprising:

A head gimbal assembly (figure 2) including an arm member (figure 2, item 124) mounted with a head slider (figure 2, item 126); and

A recording medium (figure 1, item 134);

The head slider comprising:

A conductible support (figure 1, item 124; columns 3 & 4, lines 65-67 & 1-20) for mounting the head slider to the arm member (columns 3 & 4, lines 65-67 & 1-2); and

A magnetic head part bonded to the conductible support (columns 3 & 4, lines 65-67 & 1-20), the magnetic head part carrying out at least one of recording and reproducing of information (column 2, lines 59-65);

The magnetic head part comprising:

A device to be energized (figure 2, item 150) including first and second poles for supplying a current between the first and second poles (columns 3 & 4, lines 58-67 & 1-2); and

An energizing electrode pad (figure 4, item 140) disposed on a first surface of the head slider (figure 4, the electrode pad is conductible by the left surface);

The device to be energized being conductible by way the second surface of the head slider (figure 4, item 140 on the right of the slider), the second surface not being in contact with the first surface (figure 4, the right side and the left side are not in contact).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Sluzewski with electrical connections on a opposite sides of the slider, as taught by Rancour et al, because these connections provide enough support to serve as both electrical and mechanical connections, as mentioned in column 1, lines 10-14 and further supported in columns 3 and 4, lines 44-67 & 1-20.

Regarding claims 3, 7 and 11, Sluzewski, Kamijima and Rancour disclose the features of base claims 1, 4 and 8, as stated in the 103 rejection above, and Sluzewski further discloses:

The magnetic head part further comprises:

A magnetoresistive device (figure 3, item 128) for reproducing (column 6, lines 3-6); and

An inductive electromagnetic transducer (figure 3, item 128) for recording (column 6, lines 3-6);

Wherein the magnetoresistive device and the inductive electromagnetic transducer are connected to respective pairs of electrode pads disposed on the first surface (column 7, lines 7-22 & 37-67).

Sluzewski fails to specifically disclose:

Wherein the heater pads, the MR device pads and the electromagnetic transducer pads are all disposed on the first surface.

Kamijima discloses:

Wherein the heater pads, the MR device pads and the electromagnetic transducer pads are all disposed on the first surface (figure 3; paragraph 65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place the all the electrodes of the head of Sluzewski on the first surface, as taught by Kamijima, because placing all of the electrodes on the first surface opposite to the conductive support is well known in the art.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW G. KAYRISH whose telephone number is (571)272-4220. The examiner can normally be reached on 8am - 5pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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10/8/2008

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